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ORIGINAL COMMUNICATIONS.

JABORANDI.

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Navy Department.*

ALTHOUGH the new drug "jaborandi," introduced to the notice of the profession in Paris in 1873 by Dr. Coutinho, of Pernambuco, Brazil, has been extensively experimented with both on the Continent and in England, the conclusions arrived at by different observers in regard to several of its effects on the economy are so conflicting as to render it highly probable that the leaves of distinct plants, or at least of different varieties of the same plant, have been used in the trials of this latest claimant for favor as a powerful sialagogue and sudorific. This opinion is in a measure confirmed by a statement contained in a paper read before the Lombardy Institute by Dr. Ambrosoli, and published in the *Gazzetta Medica Lombard.*, July 17, 1875, giving an account of a second series of experiments, in which the results were totally different from those he had submitted in a former communication to the Institute. In his first paper he had stated that he had found the drug almost inert, but he had since ascertained that this was occasioned by his not having the genuine article, although obtained from the Pharmacie Centrale de Paris, as, with a different supply, he had become convinced that it was an agent of great potency in producing salivation and diaphoresis.

That further supplies of leaves and bark, purporting to be Pernambuco jaborandi, but in reality consisting of specimens derived from plants differing widely in botanical characters and medicinal properties, according to the section of the Empire from which they are derived, will continue to be exported, must be expected until it has been positively determined to what natural order the plant introduced by Coutinho belongs. The difficulty in the way of settling this point lies in the fact that the term jaborandi in the Guarany tongue is a generic one, and is applied to a number of plants of an acrid, pungent taste, possessing stimulant, sialagogue, and diaphoretic properties. The word itself under-

goes slight modification in the different provinces, changing into jamborandi and iamborandi, and finally, in Paraguay, becoming yarguarundi. Consequently, with a common name, indicative merely of a similarity of medicinal properties, it is not surprising to find the term jaborandi applied to various plants in the natural orders of Piperaceæ, Rutaceæ, and Scrophulariaceæ.

In the last century Pison and Marcgraff, in their work "De Medicinæ Brasilensis," direct attention to three kinds of jaborandi, all, most probably, belonging to the Piperaceæ. Of these, the most extensively known in Brazil is the *Serronia* (*Ottonia*) jaborandi of Gaudichaud. They were all used as sternutatories and as masticatories, to increase the action of the salivary and lachrymal glands. In "Travels in Brazil," by Spix and Martius (Lond., 1824, vol. ii. p. 92), among the medicinal plants described as generally known in the capitania of San Paulo, to the southward of Rio de Janeiro, mention is made of the *Piper reticulatum* Linn., the root of which "is a powerful sialagogue, and often cures nervous toothache. The leaves, bruised, are applied with success to the bite of serpents."

Geiger, in the "Pharmacopœia Universalis," Heidelberg, 1835, pp. 250-1, refers to both the *Piper reticulatum* and the *Piper nodosum* Linn., of which latter he states that it is used in domestic practice as an irritant, and internally in chronic ulcerations. Chernovix, in his "Formulario," 8th ed., p. 403, Paris, 1868, also refers to the "jaborandi" of Brazil as the *Ottonia anisum* of Sprengel, belonging to the Piperaceæ, and states that the root is sialagogue, and is used as a masticatory to relieve toothache, and that the tincture of the root (jaborandi one part, alcohol eight) is stimulant, and is employed with friction in paralysis.

Of the plants belonging to the Scrophulariaceæ, to which the term jaborandi has been applied, we have the *Herpestes*, which were formerly referred to the genus *Gratiola*. Of these the *Herpestes gratioides* is sudorific and anti-rheumatic, and the *Herpestis monnieri* of Kunth, or the *Gratiola monnieri* of Linnæus, aperient and diuretic.

Aublet, in his work on the plants of Guiana, gives a plate of the *Monnieri* tri-

foliata, which differs from the preceding plants, and evidently belongs to the Rutaceæ. It possesses diuretic, sialagogue, and sudorific properties. This plant has been cultivated in the Jardin des Plantes for some years, under the name of *Pilocarpus simplex*. Libon, in 1847, collected and sent to Europe still another Brazilian plant, which has been classified by Lemaire as belonging to the Rutaceæ, under the name of *Pilocarpus pennatifolius*.

In comparing the Pernambuco jaborandi with the Brazilian plants in the Jardin des Plantes, Baillon (*Journal de Pharmacie et de Chimie*, January, 1875, p. 20) concluded that it was decidedly rutaceous in its character, and, in consequence of its impari-pinnate leaf and other points of resemblance, very probably a species of *Pilocarpus*, nearly allied to the *Pilocarpus pennatifolius* of Lemaire. The *Pharmaceutical Journal and Transactions* of January 23 and February 13 of the present year contains articles by E. M. Holmes, Curator of the Museum of the Pharmaceutical Society, presenting the results of his examination of a quantity of Pernambuco jaborandi, in which he was fortunate enough to find several ripe fruit. These he considers to be decidedly rutaceous in character, and he therefore confirms Prof. Baillon's opinion as to the natural order to which jaborandi belongs, and likewise believes it may be a species of *Pilocarpus*; but, as there are several genera very nearly allied to *Pilocarpus* in the tribe Xanthoxylaceæ, to which he concludes jaborandi evidently belongs, it cannot be positively determined whether it belongs to the genus *Pilocarpus* until an examination of the flowers shall have been made. These papers also contain much valuable information in regard to various parts of the plant, some portions of which will be referred to again. M. Planchon (*Journal de Pharm. et de Chim.*, April, 1875, p. 295) likewise found in a sample of jaborandi a few flowers and a fruit which, although incomplete, was sufficiently perfect to give a clear idea of its structure. His examination of the different parts of the plant has led him likewise to the conclusion that it belongs to the genus *Pilocarpus*, of which it has all the characters, the disposition of the flowers and their structure being precisely the same as in plants of this genus. "As to the fruit, it agrees with that seen, in the herbarium of

the museum, belonging to the *Pilocarpi*, and particularly to the *Pilocarpus heterophyllus* of Asa Gray."

Shortly before leaving Rio de Janeiro, in April last, I received, from a friend in Pernambuco, a small package of jaborandi-leaves, obtained from a member of Dr. Coutinho's family. As the quantity was entirely too small for experimental purposes, a larger supply was promised in a few months. This latter was received by me about the middle of last month; and on comparing the leaves with those of the original parcel, I became satisfied that they were obtained from the same plant. In addition to a number of almost perfect leaves, the package contained several stems branched as described by Holmes, at an angle of about 20°; these branches being furnished with alternate leaves, which are impari-pinnate, with from two to five opposite leaflets (Planchon has met with leaves having as many as seven, nine, and more rarely eleven leaflets), articulated to the rachis by short petiolules, thickened at the base. The leaflets, which are coriaceous in texture, vary considerably in size and outline. As a rule they may be considered as oblong-lanceolate, and are entire, emarginate, with an unequal base. The midrib rises very little above the upper surface of the leaflet, but is very prominent and sharp on the lower. The veins, which are rather more prominent on the lower surface, leave the midrib at an angle of about 60°, pursue a parallel course across the leaflet, and finally turn up and anastomose within about a quarter of an inch of the margin. The leaflets are pellucidly punctate; the dots are the receptacles of secretion, are numerous and irregularly distributed over the whole surface, and are plainly visible when the leaflet is held up to the light. Several specimens of the fruit, detached, however, from the peduncle, likewise found among the leaves, confirm the description of Holmes, that "when perfect it consists of five carpels, of which not more than two or three are usually developed to maturity;" and that "when ripe the carpels dehisce into two valves, and then remind one strongly of miniature cockle-shells with the valves open exposing the animals." The black, shining, reniform seed (one for each carpel), with its lancet-shaped hilum, its sharp ridge on the back near the apex, and the smooth, pale-yellow endocarp surrounding

it, answers so accurately to that described by both Holmes and Planchon, that, taken in connection with the character of the carpel, leaves, stem, and root, there is no room to doubt that the specimen of jaborandi sent me is identical with that taken to Europe by Dr. Coutinho.

On one point only is there a difference between the jaborandi in my possession and that examined by Mr. Holmes: namely, that the under surface of some of the leaves in my specimen is covered with a thick velvety pubescence, while the Pernambuco jaborandi examined by him is described as glabrous in every part. As he had, however, met with pubescent leaves, he remarks that there appear to be two varieties, if not species, of this *Pilocarpus*. I am inclined, however, to the opinion that the pubescent condition prevails on the young leaves, which become glabrous as they proceed towards maturity,—the view taken by Planchon, who states that the gradual passage from the pubescent to the glabrous state can be traced in the same plant, which Lemaire had already noticed and expressed in his description of the *Pilocarpus pennatifolius* in the following words: "Frutex primajuventute puberulus, deinde glabrosus."

I have been unable to ascertain, either from the numerous articles in the journals, or from the reports of the discussions on the subject at the meetings of the different societies, that Dr. Coutinho has ever communicated the precise locality from which he obtained the jaborandi, the only reference to the subject being a remark of Gubler's, that it had been obtained with considerable difficulty from the northern provinces of Brazil. This omission is supplied in the letter accompanying the specimen of leaves received by me in Rio de Janeiro, in which it is stated that the shrub is not found in the vicinity of Pernambuco, but grows in the province of Ceará, to the northward of the port.

As the results of the experiments on jaborandi on the Continent and in England are scattered through numerous journals, before giving an account of the cases in which I have tried the new drug it may not be amiss to present a brief *résumé* of the conclusions already arrived at by different observers.

In April and May of last year the *Revue Scientifique*, the *Gazette Hebdomadaire*, and *L'Union Médicale* contained notices of ex-

periments, showing that the leaves of the jaborandi possessed the properties of a powerful sialagogue and sudorific. Rabuteau prepared and took an infusion of about three grammes of the leaves, and in from ten to fifteen minutes, finding his forehead becoming moist, went to bed, when sweating came on, accompanied by profuse salivation, which continued for about two hours. Gubler, also, after repeated trials with the drug at the Hôpital Beaujon, likewise reported that it acted as a powerful sudorific and sialagogue, and that, in a few minutes after administration, the perspiration began to stand out in large drops on the forehead and face, finally covering the whole surface of the body, while at the same time the saliva flowed so profusely as to render articulation almost impossible, the quantity collected in some cases amounting to more than a pint. In continuing the experiments in Gubler's wards, Robin (*Le Progrès Méd.*, 1874, No. 21) calls attention to the increase of the lachrymal secretion previous to the appearance of the salivation and perspiration, and further states that there is also an augmentation of the secretion from the nasal, bronchial, and gastric mucous membranes. In experiments on dogs, the mucous membrane of the stomach was found to be congested, and even ecchymosed in some places. With regard to the effect of the drug on the kidneys, his researches (*Bull. Gén. de Thérapeutique*, No. 30, 1874) go to prove that the quantity of urine is somewhat diminished on the day the drug is administered, but that the next day the amount is about normal, although in some cases a slight diminution has been noticed. The amount of urea also appears to decrease on the day of administration, returning afterwards to the normal standard; the chlorides and uric acid are similarly affected. Uric acid was not detected either in the saliva or in the perspiration, but urea in considerable amount was found in both these fluids. Vomiting is also stated to have occurred thirty-eight times in ninety cases; and diarrhoea, previous to sweating, but generally subsiding as soon as the drug was discharged from the system, was also noticed in a number of instances. In thirty-two experiments, the pulse began to rise as soon as the sweating commenced, the number of beats increasing until the action of the medicine

reached its maximum, after which it became gradually less frequent, so that after the sweating stage there was a notable lowering, which sometimes persisted for several days. Sphygmographic tracings showed complete asystolia during the sweating stage, from which fact Robin infers that jaborandi acts by paralyzing the vaso-motor nerves. A gradual elevation of the temperature of the body was also noticed, beginning at the moment perspiration made its appearance, and continuing through the sweating, after which there was a reduction of from 1° to 2° C., which lasted for a day or two.

In the experiments in England by Ringer, Gould, and Murrel (*Practitioner*, December, 1874, *Lancet*, January 30, 1875, *Brit. Med. Jour.*, April 24, 1875), the observations of the French writers are corroborated so far as regards the effects of jaborandi on the skin, salivary and lachrymal glands, and bronchial mucous membrane, as, likewise, the increased frequency of pulse occasioned by its administration; that it acts on the alimentary canal sufficiently to produce diarrhoea is denied. The difference of opinion, however, between Robin and Ringer in relation to the effect produced on the temperature is most remarkable, for while the former asserts that there is a rise of from 1° to 2° , the latter as positively states that in twenty observations in eighteen adults, "in every instance the temperature fell during the sweating, the fall ranging from $.4^{\circ}$ to 1.4° ; average, 0.9° ; lasting from one and a quarter to four and a half hours, and then becoming normal." The flushing of the face, ears, and neck produced by jaborandi was absent but in one of the above cases, and with but two exceptions was followed by pallor, and more or less depression. He further states that in about one-half the cases in which he has administered the drug, the patients became decidedly sleepy during the pallor, which occurred one, two, or more hours after the administration. There was nausea in about two-thirds of the cases. Ringer's attention was first called to the effect produced on the sight by Martindale, who, after taking a full dose of jaborandi, found in the course of an hour that everything at a distance appeared hazy, and, although he could read moderate-sized type at one foot, at two feet it was indistinct. Similar disturbance of vision was observed in several other cases,

and in thirty instances where an extract dissolved in glycerin was applied to the eye, contraction of the pupil occurred in nineteen, while its action was rendered sluggish in the remainder. In this connection the case reported by Sawyer (*British Med. Jour.*, February 6, 1875) as occurring in Queen's Hospital, Birmingham, is of decided interest. The patient took six grammes of jaborandi at 10.30 A.M. Before taking the drug, his skin was dry, temperature in the axilla 98.25° , and pulse 90. At 11 A.M. there was profuse perspiration and salivation; temperature 97.9° , pulse 104, and patient said there was a mist before his eyes. At 11.40 could not distinguish objects across the ward, a distance of twenty-five feet, but could see a person distinctly on the other side of his bed. No contraction of pupil. At 12.10, temperature 96° , pulse 104; no derangement of vision; skin moist, salivation checked.

Robin also made known the fact that the salivation produced by jaborandi was completely arrested by atropia (*Le Progrès*, 1874, No 47), which he asserts produces contraction of the arterioles, that had become dilated in consequence of the diminution of the arterial tension brought about by the paralyzing action of the drug on the vaso-motor nerves. Vulpian afterwards (*Ibid.*, 1875, No. 6) remarked that it likewise considerably diminished its diaphoretic action. In the papers referred to above, Ringer, after pointing out the strong antagonism that exists between belladonna and jaborandi in their action on the secretions from the skin, salivary glands, and mucous membranes of the nose, bronchial tubes, stomach, and intestinal canal, as well as the different manner in which they affect the arterioles and pupils, gives the details of some cases in which they were used to counteract each other. In five minutes after giving a hypodermic injection of one one-hundredth grain of atropia to three men, who were under the influence of sixty grains of jaborandi, the perspiration and salivation were greatly diminished, and in twelve minutes entirely checked. To a lad who, five hours before admission to the University Hospital, had taken a grain of the alkaloid, and whose mouth and tongue were quite dry, thirty grains of jaborandi were given, with the effect of producing less dryness of mouth in a quarter of an hour. In an

hour he was sweating profusely, the mouth having become naturally moist. Dr. Ringer has also ascertained that the antagonism between the two holds good also in relation to the mammary glands, he having found the quantity of milk in two cases, where the secretion was scanty, to be considerably increased after administering jaborandi in doses of thirty grains.

Although jaborandi has been used as a curative agent in a variety of diseases, very much more extended observation will be required before it can be ascertained what its merits as a therapeutic agent really are, and in what classes of affections it is most likely to prove of the greatest benefit. Gubler and Robin, who have used it in acute articular rheumatism, noticed after the administration a lowering of the temperature, and almost total disappearance of the pain. In acute bronchitis, with emphysematous condition of the lung (*Le Progrès Méd.*, 1874, No. 47) there was improvement, with drying up of the secretion. In Bright's disease, the œdema rapidly disappeared, but soon returned, as was also the case with the albumen, which at first was considerably diminished, but afterwards increased, and in several instances exceeded the amount before the administration of the remedy. As jaborandi excites the action of the heart, Gubler, Robin, Parrot, and Carville recommend that care should be taken not to employ this remedy in cases complicated with valvular disease (*Ibid.*, 1874, No. 47). The *Journal de Thérapeutique* for January, 1875, contains an account of eight cases treated by Dr. Féréol in the Maison Municipale de Santé. In one of these, a case of chronic rheumatism, of probably syphilitic origin, the remedy was repeated fifteen different times, with relief for some hours after each administration. The remedy was discontinued, as it was not deemed advisable to continue so lowering a mode of treatment, and potassium iodide substituted, which, however, did not relieve to the same extent as the jaborandi. Relief from pain was also experienced in a case of acute rheumatism, but the medicine had to be discontinued on account of cardiac complication. In a case of gout, an attack occurred a few days after the administration; and in a neuropathic patient, with hypochondriasis, and tendency to paralysis, the hemicranial pain was increased. In the other cases the effects were negative.

M. Crequy (*Bulletin Gén. de Thérap.*, March 30) gives a case of pleurisy of the left side, where, notwithstanding the use of purgatives, blisters, and diuretics, the effusion increased to such an extent as to displace the heart to the right side. Under the use of jaborandi, in doses of five grammes every two or three days, the effusion was gradually absorbed. In all, nine doses were taken. Czernicki has had the opportunity of investigating the effects of jaborandi in several cases of mumps occurring in the garrison at Lunéville, and gives (*Gazette Hebdom.*, April 2, 1875) an account of the remarkable success attending its use in one of these, which was complicated with metastatic orchitis. On the fourth day of the disease, the testicle being double the natural size and very painful, the patient's skin hot, and the pulse rapid, with reduction of the parotids, a dose of jaborandi was given at 3 A.M. In fifteen minutes the patient was sweating profusely, and saliva flowing freely, affording relief. The next morning there was very little pain in the testicle. No other treatment was ordered, and, two days after, the patient left the infirmary with no trace of the disease remaining. Dr. Franz Riegel, of Cologne, has also derived benefit from the employment of the remedy in effusions into the pleura, chronic pneumonia with nephritis, acute and chronic rheumatism, cirrhosis of the liver, and lead-colic. He has, moreover, noticed among the after-effects hiccough and transient *muscæ volitantes*. The after-effects were, however, always moderate, and did not persist for any length of time. An interesting fact in relation to the new drug has lately been brought to light by the investigations of Ringer, whose experiments show that children are but slightly affected by it, frequently no effects being noticed after the administration of thirty or even sixty grains. Out of seventeen children to whom it was administered, only two sweated freely; in seven no effect was produced; and in the remainder the skin merely became moist. Salivation was likewise absent in the great majority of cases, and, when it did occur, it was merely enough to make the mouth moister than usual. Vomiting occurred in eight cases, mostly two hours after the medicine had been taken.

On the Continent, jaborandi has generally been administered in doses of from

four to six grammes of the bruised leaves, infused in hot water, the dregs being taken along with the liquid. In England, Ringer and others have employed a tincture containing thirty grains to the fluidrachm, two of which are considered an ordinary dose. With the view of avoiding the vomiting frequently produced by administering the drug by the mouth, Dujardin de Savignac has made use of the infusion in the form of enemata, which he found effectual in producing salivation and sudation. In a case of uræmia, he used a hypodermic injection of the concentrated infusion without any irritant action resulting.

In the *Répertoire de Pharmacie*, March, 1875, M. Byasson states that his examination of the jaborandi-leaves shows that they contain a volatile oil, an acrid resin, and an alkaloid, which he separated as a viscid aromatic substance, soluble in chloroform, ether, absolute alcohol, ammonia, and dilute acids. As it is the active principle of the plant, Mr. Holmes has proposed to call it "pilocarpina," as the term jaborandina has already been appropriated by Parodi (*Revista Farmacéutica*, Buenos Ayres, January, 1875) for the alkaloid extracted by him from the Paraguayan yarguarundi.

A. W. Gerrard has lately succeeded in obtaining the chloride and nitrate of the alkaloid in crystals. The full therapeutic effects of the drug were brought about within an hour by half a grain of the latter salt, and one drop of the solution (gr. j to f3i) placed in the eye produced decided contraction of the pupil.

In the following cases in which I have tried the effect of the jaborandi-leaves, the preparation used has been a fluid extract, made with fifty per cent. alcohol, the dose of which, representing sixty grains, is one fluidrachm. As my observations, in every case, in regard to the temperature of the body, are entirely at variance with the results obtained by Ringer, I have thought it advisable to present one or two cases in detail, so that the changes in this respect may be seen at a glance.

J. J., æt. 30, syphilitic rheumatism. Has had occasional pains in joints, and suffers from constant pain and soreness in both heels. Before administering jaborandi, September 30, patient's pulse was 75, and temperature in the axilla 99.2°. Was placed in bed, warmly covered, and one fluidrachm of fluid extract given at 10.35 A.M.

At 11.05 there was flushing of face, ears, and neck, and in a few moments drops of perspiration appeared on the forehead, and the mouth began to fill with saliva; pulse 90; temperature 99.4°.

At 12 M. free but not profuse perspiration over the whole body; salivation quite abundant; pulse 108; temperature 99.5°. No contraction of pupil or disturbance of vision. No increase of nasal or lachrymal secretions.

At 12.15 flush of face had passed off, but no pallor of countenance.

At 12.30 less perspiration, but salivation very free; pulse 100; temperature 99.8°.

At 1 P.M. skin merely moist, and salivation much diminished; pulse 88; temperature 99.4°.

At 2 P.M. skin natural and no salivation; pulse 80; temperature 99°. No effect produced on bronchial secretion during action of medicine, and no pain over pubes. Stomach not at all disordered. Saliva, twelve fluid-ounces.

October 1.—At 10 A.M. pulse 78; temperature 99°. Slept well, has a good appetite, and feels lighter and freer from pain.

October 5.—Patient is improved, but, still having some soreness, has requested another dose, which was administered at 3.30 P.M. Before taking medicine, pulse 80; temperature (in mouth) 98.6°. Flushing of face at 4.05; salivation and perspiration both profuse; pulse 96; temperature 99.5°.

At 5 P.M. salivation and perspiration continue as before; pulse 108; temperature 100°.

At 7 P.M. action on the skin and salivary gland still continuing; pulse 112; temperature 99.7°. Sickness of stomach and headache.

At 9 P.M. action entirely ceased, and skin natural; pulse 90; temperature 99°. Total amount of saliva thirteen fluidounces.

October 6, 10 A.M.—Feels quite well, and has hardly any pain. Pulse 88; temperature 99°.

F. M., æt. 35, syphilis consecutiva. Had chancres two years ago. Now troubled with ulcerations in mouth, nose, and urethra, and feeling of constriction about frontal sinus; occasional pain in chest; dryness of skin, and scaly eruption on arms and thighs; subject to periods of melancholy since January last.

Took one fluidrachm of extract at 1.30 P.M., at which time his pulse was 77, and temperature 97°. At 2 P.M. flushing of face, moisture of forehead, and saliva collecting in mouth. Pulse 81, temperature 99.5°. No change in pupil.

At 2.30 P.M. perspiration over entire body; saliva three fluidounces; pupils slightly contracted. Pulse 90, temperature 99.7°.

At 3 P.M. perspiration still free; saliva increased to six fluidounces. Pulse 93, temperature 100.2°.

At 3.30 perspiring chiefly on face, legs, and

feet; saliva amounts to eight fluidounces. Pulse 94, temperature 100.2°.

At 4 P.M. perspiration continues, and saliva measures ten ounces; additional contraction of pupil. Pulse 92, temperature 100.1°.

At 4.30 diminished amount of perspiration; saliva twelve fluidounces. Pulse 90, temperature 99.5°.

At 5 P.M. less perspiration; saliva thirteen fluidounces. Pulse 82, temperature 99.4°.

At 5.30 skin merely moist; saliva fourteen fluidounces. Pulse 80, temperature 99.25°.

At 6 P.M. skin was moist, and salivation had ceased. Pulse 80, temperature 99.1°. There was no derangement of vision, or nausea, and but slight paleness as action of medicine began to decline.

The patient took a second dose after the lapse of five days, with almost precisely the same effect throughout on the pulse and temperature as noted on the first administration. He vomited, however, about half an hour after eating supper.

The next morning the pulse and temperature were the same as before the dose was taken.

In a third case of syphilitic disease, in which the feet were likewise the seat of rheumatic pains, occasioning great discomfort during the day and loss of sleep at night, so much relief, lasting for about six days, was afforded by the administration of the drug on the 27th of September, that on the 5th of October the dose was repeated, with the effect of again relieving the pain and affording rest at night.

In this case also, the temperature, on both occasions, continued to rise until the action of the medicine reached its maximum, and then gradually fell as the perspiration and salivation diminished, until, at the cessation of the action, it stood at the point indicated before the administration.

Another patient, suffering from orchitis and incipient bronchial trouble, and whose pupils were largely dilated, presented the opportunity of testing the efficacy of the drug in several particulars at the same time. A fluidrachm of the extract was given, and in about ten minutes there was flushing of the face, augmentation of the lachrymal and bronchial secretions, and profuse salivation and perspiration. After the lapse of an hour, the pupil was very considerably contracted. The pulse in this case rose from 88 to 120, and the temperature from 99.7° to 103.1°. The next morning the pain had entirely ceased, the cough had disappeared, and the patient is in a fair way to recover without further treatment.

The almost immediate improvement in

the general symptoms of a case of pneumonia occurring in the practice of a friend has led us both to the conclusion that jaborandi will prove a powerful, yet safe, means of moderating and modifying febrile action.

A case of subacute rheumatism of six weeks' duration, presenting itself in hospital practice, the administration of two doses of jaborandi so completely removed every vestige of the pain and soreness that on the third day, from the time the second dose was taken, the patient was discharged from the institution, cured.

In three cases of chronic rheumatism, in each of which the jaborandi has been taken twice, the pain was in every instance relieved for periods of different length after each administration; but whether the permanent removal can be effected by continuing the use of the drug at intervals, is a question to be yet decided. The opportunity of testing the antagonism between atropia and jaborandi being afforded by a patient whose pupil had been dilated with atropia for ophthalmoscopic examination, about a grain of a soft extract, made by evaporation of the tincture, was rubbed up with a little glycerin, and painted around the orbit. In half an hour the pupil had contracted very considerably, and at the end of two hours it had returned to its natural size. Since then, I have also tried the effect of the above extract on the pupil in its natural condition, and in four out of five cases found that it produced more or less contraction.

The above, with the addition of two healthy adults, in whom drachm-doses produced the expected results, but without any points deserving special mention, although not presenting a formidable array of experiments, still show such certainty and uniformity of action, that there can be little doubt that jaborandi possesses the properties claimed for it by Dr. Coutinho, namely, those of a powerful, yet safe, sialagogue and sudorific.

In the main features, my observations of the effects of the drug coincide very closely with those already recorded. In no case has either salivation or perspiration been absent, although they have varied considerably in amount. In several cases the salivation amounted to about twenty fluidounces, and in none did it fall below six ounces. The perspiration was also profuse in the great majority of cases, and in the remainder quite free. The pulse in-

variably rose during the action of the medicine, decreasing in frequency as the effects passed off, until it reached the number of beats noticed before the administration. The temperature followed the same rule, except in one case, namely, in that of the patient with subacute rheumatism, where there was lowering during the height of the action. This fall of temperature was accompanied by very decided pallor, nausea, and hiccough that persisted until the effects of the medicine had passed off. As the action declined, the temperature returned to the point noted before the administration.

As confirmatory of the observations of Robin in regard to the rise of the temperature during the action of the medicine, with which mine agree, it may be well to state that Rabuteau, in his own case, found the temperature to have been highest when the medicine was acting most powerfully; that Ambrosoli also records a rise of temperature of some tenths of a degree; and that Riegel likewise acknowledges a primary increase in this respect. The very considerable fall of from one to two degrees, mentioned by Robin as continuing from one to two days after the administration, has not been noticed in any of the above cases. As a rule, the temperature at the close of the action was precisely the same as that taken before the drug was given, and in the few instances where it fell one-tenth or two-tenths of a degree, it returned before the next day to the point noted before administration.

Diarrhœa did not occur in a single case. Increased secretion from the nasal mucous membrane was not remarked in any instance, and augmentation of the lachrymal in only two or three. Pallor was not well marked in the great majority, while the depression was invariably slight. Vomiting occurred in two cases, and there was more or less nausea in about one-third.

M. Carville has reported to the Biological Society of Paris some interesting investigations in regard to the physiological action of *jaborandi*, and valuable contributions on the same subject have been made by Mr. Langley, of St. John's College, Cambridge. An account of these researches will be found in the *London Medical Record* for December, 1874, and in the *British Medical Journal* for February of the present year.

PHILADELPHIA, October 7, 1875.

TWO CASES OF INFLAMMATION OF THE MIDDLE EAR DUE TO ACQUIRED SYPHILIS.

BY FREDERICK R. STURGIS, M.D.,

Clinical Lecturer on Venereal Diseases in the University of the City of New York (Medical Department), etc.

THE two cases which I am about to report are interesting, as showing how the ear, as well as other organs of the body, participates in the general poisoning known as syphilis; and it also shows another important fact,—one which has only recently acquired its full value,—viz., that the appearances of the lesions in syphilis are, perhaps without exception, not peculiar to that disease, or unshared in by others.

Case I.—K., a young unmarried man of about 30 years of age, came under treatment with iritis of the left eye, congestion of the pharynx, and mucous patches of the tongue. No mucous patches were seen in the throat.

He gave the following history: Primary lesion appeared on May 15, 1872, which, under local treatment, recovered. Three months after the primary lesion, he had nocturnal cephalalgia, sore throat, an eruption (kind not given) on arms and legs, and slight alopecia.

Under internal treatment (unknown) these symptoms disappeared, to give place to other attacks of pharyngitis and a diminution in visual acuteness, but, as he expressly states, without inflammation or soreness. This occurred four months after the chancre.

He was ordered inunction of one drachm of mercurial ointment daily, which was changed in a few days to half-grain pills of the protoxide three times daily. Matters went on well until May 15; then the tongue had entirely healed, but an ulceration was seen upon the right anterior fauces. He also complained of pain in the right ear. (Let me say that he admits many years ago having had a running from both ears, which was cured.) Upon examination, it was found that on the right side the tympanum was sunken, the light spot very much diminished in size, the membrane was opaque and soggy-looking, and there was congestion about the periphery and the malleus. Along the handle of the malleus is an interstitial deposit, crescentic in shape, which I thought to be due to the anterior suppuration. The present soggy condition is very probably owing to the syphilis. On the left side the tympanum was very much sunken and opaque, looking as though thickened. No light spot. Hearing-distance in both ears 11".

The throat was touched with a gr. x solution of arg. nitr., and he was directed to use a chlorate of potash gargle. On the 17th the ulcer of the throat was one-half its former

size. Pain in the ear almost entirely gone. Examination now showed that the tympanum had lost its succulent look, and was more translucent; otherwise, as before. Left ear unchanged.

20th to 22d.—Ulcer of the throat quite well. Iritis disappeared. Ear: right-side tympanum lucent and more normal in look. Crescentic exudation diminished in size. Light spot clearer. The membrane still sunken. Left ear as before. Hearing-distance in right ear 12"; left ear 11".

June 10.—Eye and throat entirely well. No congestion or ulceration of the latter. No further pain in the ear. In the right ear the tympanum is sunken and opaque, but without the soggy look it had previously. Light spot normal. Left side unchanged.

Case II. is that of a young man who contracted his chancre April 21, 1873, which was followed on May 16 by an erythema maculatum, hemicrania, indurated anterior and posterior cervical glands, mucous patches on the tongue and mouth, but none on the throat. The latter was, however, markedly congested. He was put upon mercurial treatment; nothing special occurred until the 5th of June, forty-five days after the appearance of his primary lesion, when the following record was made. Roseola gone; induration of inguinal glands and of chancre steadily growing less. No mucous patches in the throat. Posterior and anterior cervical glands smaller. Reports pain in the left ear of a few days' duration; worse at night, extending up and down both jaws. Examination showed that the tympanum was sunken and opaque, hardly soggy, but looking as though infiltrated. Light spot has disappeared. No congestion of vessels. Hearing-distance 30". Right side normal.

Instillation of atropine was made to the ear, and the mercurials vigorously pushed, and on the 9th it was noticed that the pain had entirely disappeared from the ear, which, upon examination, was found to have the tympanum sunken and opaque, but without the semi-soggy, moist look which it had presented on the 5th. The light spot beginning to be visible. The hearing-distance on that side still remained 30". From that time on, the ear continued to improve (if I remember right); the hearing-distance on that same side came up to 40", and, as he was free from symptoms, I did not see the patient again until October, 1873, when he reported having had a decided epileptiform seizure (an unusual thing with him). He lost consciousness, and, on recovering from the fit, he found his lips and tongue bitten, and the former covered with foam. This attack was preceded by continued and severe headaches at the vertex and over the occiput. He was kept upon treatment for one month; the symptoms were entirely relieved, and since that time he has not reported himself.

16 WEST THIRTY-SECOND STREET, NEW YORK.

DEPOSITION OF THE OVA OF THE FLY IN THE NASAL FOSSÆ—RECOVERY.

BY WM. F. BUCHANAN, M.D.,

Capt. and Asst.-Surg. U.S.A.

SEPTEMBER 14, 1875. I was sent for to visit a Mexican woman in the settlement of San Angelo, adjacent to this Post. The messenger, her son, stated that she would die before morning if she did not get relief. I found a woman aged about 80, in a continuous strain of lamentation in her *lengua español*, as near as I could interpret, calling upon all the saints she knew of to deliver her, either by recovery or death, from her terrible sufferings. Her son stated that, two nights previous, a fly had got into her nose whilst she was sleeping, and that she had now worms in her nose. She complained of pain in the nostrils, forehead, and throat, difficulty of swallowing; there was some tumefaction of the eyelids. The pulse was about 100, the bowels constipated. Her nose had been bleeding considerably, and there was a constant sero-sanguinolent discharge. No worms could be seen, and although her son said that he had seen them up her nose, it was thought that he might have been deceived, and that the symptoms might be due to other causes. A purgative of sulphate and calcined magnesia was ordered, a small blister applied over each maxillary sinus, and an injection of sulphate of zinc, acetate of lead, and tincture of opium, in nostrils.

September 15.—Condition same; symptoms rather aggravated; quinine two grains every three hours.

September 16.—Great pain in head and face, in frontal and maxillary sinuses; slightly delirious, talking wildly; pulse about 115; thirst; face swollen; eyes closed by tumefaction of the lids, with slight purulent discharge. Several maggots had appeared at anterior nares, and one or two had been removed. Quinine continued, sweet spts, nitre, grt. xxx every two hours, and an injection to be used frequently in nares of diluted liq. sodæ chlor.

Sept. 17.—Condition not much changed. A small orifice was noticed in soft palate in median line, at its junction with hard palate, through which one or two maggots were protruding; these were removed. Twelve or fifteen had been discharged since the previous day's visit. Injection through this orifice and anterior nares, etc., continued.

September 18.—Suffering great, with both moral and physical pains; continuance of occasional delirium; opening in soft palate enlarged. An opening had now been caused by the maggots on the bridge of the nose at junction of cartilage with nasal bone, through which, and the opening in soft palate, about twenty-five maggots had been discharged since the previous day. Beef-tea, corn-starch,

quinine, sweet spts. nitre, etc., continued. A thorough injection was made through orifices in nose and soft palate, and through anterior nares, of the following:

R Acid. carbolic. crys., ʒiiss;
Aqua, ʒvi.—M.

Followed by the use of sweet oil, with directions to continue the use, in the interim of my visits, of the liq. sodæ chlor.

Sept. 19.—Patient somewhat improved. The site had been found less desirable, and the result proved an evident determination to abandon the locality; two hundred and twenty maggots had been discharged through the different means of exit made by themselves since the visit on previous day. Most of them were of the size of a small goose-quill, and from five to eight lines in length.

From this time the patient rapidly recovered, twenty to thirty maggots being discharged each day for a few days, when they ceased. A portion of the anterior part of the soft palate, size of a silver quarter of a dollar, sloughed out, but now presents a healthy appearance, and appears to be closing, as also does the orifice on bridge of nose. The swelling of eyelids, pains in head, face, and neck, difficulty of deglutition, etc., all gradually subsided until recovery. There were in all about three hundred and twenty-five maggots discharged, all large.

During the treatment of this case, all the standard works at hand, and many of the journals, were searched, and the only record of a similar case found was in Gross's Surgery, vol. i. page 347,—singularly, reported also from Texas,—and which resulted in death.

FORT CONCHO, TEXAS, September 24, 1875.

NITRITE OF AMYL IN ASTHMA.

BY J. J. LEISER, M.D.

THE following report of cases may be of interest:

Mrs. G., aged 40, for several months had her sleep interrupted regularly at 4 o'clock A.M., and was compelled to sit up the remaining part of the night in agonizing efforts at breathing. Large doses of quinine had some influence over the paroxysms, and when fully under its influence she would escape one or more nights. It began finally to lose its influence, and I gave her the amyl. The first use of it seemed to fail, but only because she did not inhale freely enough of it. The second night it was administered until the prominent effects became apparent,—fulness and flushing of the face, throbbing sensation of the temples, etc.,—when she experienced immediate relief, and returned to sleep at

once. After a short use of it her spells left entirely, but I attribute such result to the season.

Mr. M., aged 35, came into my office suffering from a severe attack of asthma. I gave him five drops of nitrite of amyl to inhale, with immediate relief. This patient was afflicted with severe paroxysms of asthma on every occasion of a slight cold, and it now requires that at such times he shall take several inhalations daily and at bedtime, by which he can shield himself effectually from distress. It is the only remedy which, after a search of years, has proven entirely satisfactory. He uses five to ten drops.

Mrs. R., aged 60, simple paroxysmal asthma. She has become accustomed to the use of nitrite of amyl, and inhales it direct from the bottle,—enough to cause some of the effects of the remedy, which always disperses the asthma and leaves her comfortable. She considers her bottle of amyl her dearest companion.

I have given the amyl salt in a number of cases, and in only one has it failed: in this I think the patient did not use it effectually, as she was completely prejudiced in favor of an asthma specific, which usually relieved her.

WATSONTOWN, PA., October 11, 1875.

NOTES OF HOSPITAL PRACTICE.

HOSPITAL OF THE UNIVERSITY OF PENNSYLVANIA.

SERVICE OF PROF. D. HAYES AGNEW.

Reported by Dr. J. WM. WHITE.

NECROSIS OF TIBIA.

THIS patient, a girl æt. 18, was seized about six weeks ago with severe pain over the lower portion of her tibia, followed by redness, swelling, and, finally, by a copious discharge of pus. At the outside of the knee you will notice a marked projection, looking like a lateral displacement. The joint and patella are perfectly movable, and the latter has not been floated away by the swelling from the trochlear surface of the femur, but rests directly upon the condyles. There is no restriction of movement. The development of the tibial disease is probably due to some periosteal trouble, and the condition of the knee to the diffusion of inflammation. By freely opening the parts over the lower portion of the leg we find the exact state of affairs, and the cause of the morbid appearances. A probe

passes down to the medullary canal of the bone, in which there is commencing necrosis, which has given rise to the periostitis. The œdematous swelling at the knee is an instance of the extension of inflammation by continuity of tissue, the blood-vessels of the bone ramifying in the periosteum, and then giving off branches to the soft parts immediately overlying it. The original disease must be due to some constitutional vice or defect which may have been hereditary, for, although she has a suspicious ulcer at the corner of her mouth, there is no history of any specific disease. From the extension of the inflammation over so large a portion of the limb, we may expect to find a great part of the shaft of the bone involved. We will have to wait for a little while until nature has commenced the work of removing the dead bone. When we find that some of it is movable, or, in other words, that a sequestrum has formed, we will proceed to operate for its extraction.

TRANSLATIONS.

THE ELIMINATION OF PHOSPHATES IN CHLOROSIS AND IN PHTHISIS (*Le Mouvement Médical*, September 18, 1875).—M. Teissier has sought to discover if an examination of the excretion of the phosphates could lead to a diagnosis between true chlorosis and the earliest stages of phthisis. He has concluded that—1. All chlorotic persons who, without being on an exclusively animal diet, present a diminution in their excretion of phosphates, even although they may become emaciated, will not probably become the subjects of pulmonary phthisis. 2. All chlorotic persons who, apart from the influence of diet, show an augmentation in the excretion of the phosphates, are likely to become phthisical. In the normal condition the earthy phosphates exist in urine in the proportion of two to three grammes daily. In about two hundred and fifty observations M. Teissier has found that in chlorosis the earthy phosphates have varied from merely a trace to one gramme per litre, and the phosphoric acid from twenty centigrammes to one gramme. On the other hand, in consumptives the excretion of phosphates reached the sum total of from three to six grammes per litre. These observations were made with

great care; the urine was taken in the morning, not during the period of digestion, was examined as to density, alkalinity, and acidity, and was analyzed by various processes, the results being always identical. In order to confirm these results, however, and to see if the alimentary regimen influenced in a definite manner the phosphatic excretion, M. Teissier kept himself for five days on an exclusively animal diet, and found that although the phosphates increased it was in an infinitely smaller proportion than in consumptives. This fact seems confirmatory of the clinical data: a consumptive seems to consume, in some sense, his own tissue, and, even while making allowance for his regimen, it is evident that in such cases there is a considerable waste of the phosphatic elements. This fact once unequivocally established may be of considerable importance in the diagnosis of commencing phthisis, which is often attended with considerable difficulty.

J. W. W.

PLEURAL EFFUSIONS DURING TUBERCULOSIS (*La France Médicale*, September 18, 1875).—At a recent meeting of the French Association for the Advancement of Science, M. Leudet read a paper on the occurrence of large effusions in the pleural cavity during the progress of tuberculous disease. The conclusions to which he came were as follows: 1. During the course of pulmonary tuberculosis the pleura may become filled with an effusion. 2. This effusion is usually pseudo-membranous; it may be serous, purulent, or hemorrhagic. 3. Pleurisies involving the whole of one pleura are more often tuberculous than idiopathic. 4. Patients who die during the existence of these effusions frequently present cavities with tubercles partly calcified and stationary, or, in a word, the lesions of a regressive tuberculosis, pertaining particularly to irregular phthisis. More rarely the tuberculosis is double and is softening, while still more rarely we find miliary tubercles. 5. The tubercular disease is neither more extensive nor more advanced on the side of the effusion; indeed, it is often less than on the opposite side. 6. The pleuritic affection does not often cause death by its mere extent. 7. Some patients die in a cachectic state before the complete resolution of the effusion. 8. The majority of invalids attacked with pleurisy during the course of pulmonary tuberculosis recover from its effects. 9. The cure of the effu-

sion is in general slower than in non-tuberculous individuals. 10. Purulent pleurisy occurring in the tuberculous is susceptible of cure. 11. A copious effusion in the pleura does not often accelerate the development of pulmonary tubercles, and does not usually provoke a more rapid evolution of the disease on the affected side than on the other. 12. Purulent pleurisy does not seem to accelerate the development of tuberculosis of the lungs.

J. W. W.

HEMIPLEGIA OF THE LARYNX COINCIDENT WITH HEMIPLEGIA OF CEREBRAL ORIGIN (*La France Médicale*, September 28, 1875).

—Dr. Luyo reports the case of a woman who had a sudden attack of apoplexy with hemiplegia of the left side, but with no disturbance of sensibility or of the organs of special sense. The congestive phenomena of the onset being calmed little by little, the patient regained consciousness, and stated that four years previously she had been struck for the first time with left hemiplegia, and since then had been aphonic. Her intelligence was good, and she spoke distinctly, but in a low voice. She had no paralysis of the tongue, the soft palate, or the lips. A few days later, she was seized with new congestive symptoms, and died insensible.

At the autopsy, atheromatous alterations of the cerebral arteries were found, with numbers of little cavities filled with serum. The lungs were emphysematous and cedematous. The right ventricle of the heart was dilated and flaccid, the left slightly hypertrophied. The aorta was incrustated with confluent atheromatous deposits. In the larynx there was secondary degeneration of the muscular apparatus, particularly the thyro-arytenoid muscle of the left side, with degeneration of the recurrent nerves.

J. W. W.

OBSTINATE CONSTIPATION DUE TO A PEDICULATED LIPOMA OF THE RECTUM (*Le Progrès Médical*, August 14, 1875).

—M. Cl. Bernard reports the case of a lady aged 83 years. In her youth she had had hæmorrhoids, and, later, a uterine misplacement, which was cured. She had also had some digestive troubles, with alternate constipation and diarrhoea. Within two years, however, the constipation had become very obstinate. She felt a sensation of weight at her anus, and was unable to have an evacuation without the employment of injections. She never passed any blood. The trouble continued to grow

worse; her calls to stool were more frequent, but all her attempts were ineffectual without the use of injections. The sensation of weight at the anus persisted and increased. On one occasion finally she found herself unable to take any injection, as the liquid refused to enter. She herself felt an obstacle above the anus, and had the whole time an irresistible desire to go to stool. Not wishing to employ a physician if it could be avoided, she thrust her own finger deeply into the anus, and encountered something soft and pulpy. Two hours later she made a last and determined effort to have an evacuation, and passed a little ovoid body, slightly soft, reddish, and a little larger than a pigeon's egg. This body was passed alone, with no accompaniment of blood or of fecal matter. She immediately felt relieved, and since then has not been compelled to use an injection, and has had no colic or cramps. The body evacuated was at first considered to be a rectal polyp, but on section it was seen that it was composed solely of fatty tissue. Its weight was twenty grammes.

J. W. W.

UNUSUAL FORM OF NÆVUS.—Geber (*Centralbl.*, No. 35; from *Vierteljahrschrift f. Dermat. u. Syphilis*, 1874, No. 1) has observed the following peculiar pigment anomaly in the case of two sisters. The elder showed at two years of age a piebald condition of the skin, with conjunctival catarrh, and photophobia. When four years old the pigmentation affected the face and back of the hands. The condition of photophobia was quite marked. Later, painless tubercles appeared on the face, neck, and back of the hands, growing rapidly in size and coalescing. In her eighth year she came under observation, when certain collections or areas of pigment-deposit, interspersed with pigmentless spaces, were noticeable. The boundaries of the pigment-spots were the seat of enlarged vessels. The younger sister became similarly affected in her fourth year.

Microscopic examination showed the epidermis thickened and penetrating the corium in the form of conical processes. Stellate, finely-granular pigment-cells could be observed in the epidermis, particularly in the deeper layers. The vessels were changed to solid cords. The tubercles or tumors proved to be pigmented sarcoma, and were found only upon the pigmented areas of the skin.

PHILADELPHIA MEDICAL TIMES.

PHILADELPHIA, OCTOBER 30, 1875.

EDITORIAL.

HOMŒOPATHY IN THE UNIVERSITY OF MICHIGAN.

SINCE the publication of our editorial upon this subject, Dr. Abraham Sager has given to the world facts which entirely alter the aspect of the case. The matter is of such importance that we take from his pamphlet the following extract :

"It will be recollected that about the middle of the session of the last Legislature, a bill was introduced into the Senate, drawn up by one of the most prominent homœopathic doctors, asking an appropriation of six thousand dollars for the establishment of a complete college of homœopathy in such city or village of the State as would contribute most liberally to the expenses involved in such location, Ann Arbor being excepted. In this form the bill passed the Senate with little opposition.

"Within a day or two after the introduction of this bill, and prior to its passage in the Senate, a meeting of the medical faculty was called by two of the oldest members, at which they proposed that the faculty should intimate a willingness to make some concession to the homœopaths by which they might be allowed to acquire the long-sought-for connection with the University. This proposition was negatived by the majority of the faculty, chiefly on the ground that the circumstance called for no concession. Near the close of the session, the bill passed the House in a modified form, authorizing the Board of Regents to locate the new School at Ann Arbor. The faculty were again convened, and requested to intimate an acceptance of the act of the Legislature, but hesitated to express any definite opinion. The member of the faculty at whose request the faculty had been convened went immediately to Lansing, to co-operate with a member of the Board of Regents to procure the passage of some appropriation bills for the hospital and college of dentistry, which,

from opposition of the homœopaths, had previously failed. A public announcement was made by a Regent that the board would accept the appropriation and carry out the law. Whereupon the desired appropriations were promptly made, and assurance privately given by the friends of homœopathy in the Legislature that any other appropriation would be made if the medical faculty would cease to offer opposition.

"A few weeks later the faculty were convened by the request of Regent Rynd, and his plan of organization of the homœopathic school was submitted to them. Every member of the teaching faculty but one being present, it received their assent. Thus endorsed by the teaching faculty, it was soon after adopted by the Board of Regents. The minutes of the board contain not the slightest trace of any dissent on the part of the faculty, not the least intimation of any protest."

It is hardly possible but that this relation is a correct statement of facts; and, if it be so, evidently the faculty of the Michigan University did not have an accomplished fact to deal with, but are responsible to their professional brethren for having aided and abetted the introduction of homœopathy into the University. Apparently, their only defence lies in the denial and disapproval of Dr. Sager's assertion.

The belief which we had when writing our former editorial was an almost necessary inference from the published statement of the faculty. If this body were, indeed, brought face to face with a settled fact, then was their action proper, at least according to our thinking. But, even if the retention of the chairs by the faculty was proper, it by no means follows that the profession should sustain the Regents of the University in their action. Far otherwise, it seems plainly to be the duty of every medical preceptor to urge the student to have no connection with a college so tainted. If the medical classes were to dwindle to a mere shred and patch-work, possibly the Regents would perceive the folly of their action, and would put an end to the strange agglomeration.

ACCORDING to a letter in the *Sydney Herald*, the number of deaths during the recent epidemic of measles in the Fiji Islands amounted to about forty thousand. It is stated that

"All work was suspended for some months. You could pass through whole towns without meeting any one in the streets, which were soon completely covered with grass. Entering a house, you would find men, women, and children all lying down indiscriminately, some just attacked, some still in agony, and others dying. Some attempted suicide, and not always unsuccessfully. We are further told that 'as the scourge became more permanent four or five were buried together in one grave. In some cases the dead were buried in the earthen floors of the houses, in others just outside the house.' It is not surprising to find that 'some made fruitless appeals to their ancient gods. Some inland tribes, who had only recently embraced Christianity, considered that the disease was conveyed by the religious teachers, and then abandoned their new religion. Among these, some were for killing the teachers; but wiser counsels prevailed.'"

DR. JOHN HUGHES BENNETT, whose death is announced, was born in 1812. He commenced his medical studies in Maidstone in 1829, graduated in Edinburgh in 1837, spent four years in France and Germany perfecting himself in his profession, and in 1841 returned to Edinburgh. Seven years later he was elected to the chair of Institutes in the University. His long period of preparatory study contrasts very strongly with the high-pressure, pop-and-go system which prevails in this latitude.

WE have received a printed card issued by the Faculty of the Indiana Medical College, from which we make the following extract:

"The Faculty of the Indiana Medical College, and Board of Trustees of the Bobbs' Free Dispensary, desire to state to the profession at large, 1. That the action of the management of the Bobbs' Free Dispensary in regard to Homœopathy in connection with the dispensary was entirely without the knowl-

edge or sanction of this Faculty or Board of Trustees."

We do not see that this statement has any very essential bearing upon the case: no one, so far as we know, ever asserted or believed that the trustees or faculty of the Indiana Medical College did sanction the action spoken of, excepting in so far that they still use the Bobbs' Free Dispensary, and allow themselves to be associated with the homœopathic practitioners.

CORRESPONDENCE.

NEW YORK, October 18, 1875.

TO THE EDITOR OF THE PHILA. MEDICAL TIMES:

DEAR SIR,—The winter sessions at the colleges opened about the 1st of October, and at all of them, we understand, there is quite a large attendance of students.

At the medical department of the University the introductory address on "The Ethics of Medical Men" was delivered by the Rev. Dr. Howard Crosby, the Chancellor of the institution. That at the College of Physicians and Surgeons was by Prof. C. R. Agnew, and that at Bellevue by Prof. Peaslee.

The most important paper read at any of the Societies since the date of our last letter, at least in its practical bearings, was one by Dr. R. W. Taylor, at the Medical Library and Journal Association, on the "Transmission of Syphilis from Child to Nurse," or, as he stated the subject more fully and definitely, "The Dangers of Syphilitic Infection between Infants at the Breast and Nurses in Lying-in and Children's Asylums and in Private Practice." The question was treated temperately and philosophically, and with great clearness and force, by Dr. Taylor; and we believe that his paper is calculated to do much good, on account of its pointing out the laxity now existing in many of the institutions named, by putting the physicians in attendance on their guard, and by rendering the examination in selecting wet-nurses more rigid on the part of the profession in general. It may, therefore, be of interest to dwell with some detail upon the views advanced by Dr. Taylor. He commenced by saying that though this subject seemed to be well understood and appreciated abroad, it had somehow been strangely neglected in this country; never having received that careful attention from medical men which its vital importance demands.

The history of the case which he made the basis of his remarks was somewhat as follows: A perfectly healthy young married woman of

nineteen was admitted to a lying-in asylum in this city on the 5th of May, 1875, and delivered the same day of a fine, healthy child. According to the rules of this institution, each mother is required to nurse one or more infants besides her own; and she was given a feeble child, with a wrinkled skin and having a bad sore mouth, which she described as "sprue," whose mother was about this time discharged to a hospital on account of a leg-ulcer and other troubles. Among the women it was the general impression that she was the subject of syphilis. In a few days this child, on account of its weak state, was transferred to the suburban branch of the asylum, and a newly-admitted foundling was assigned to her, much against her will. The second child she described as having such a wrinkled skin that it looked like "a little old man," and suffering very badly from the sprue. Yet, notwithstanding its appearance and condition, and the earnest protest of the woman, she was peremptorily ordered by the physician in charge to nurse it. She fed this child, as well as the one previously assigned her, exclusively from the left breast, reserving the right one for her own child alone. At the end of two weeks from her admission, she left the institution, and after this date she nursed her child indifferently at either breast. While she was in the asylum she suffered from a little tenderness of the nipples, but otherwise she had been and continued in excellent health.

On the 26th of June she was engaged as a wet-nurse in a private family, this last nursing being entirely free from disease of any kind. For some reason the lady was not pleased with her, and discharged her in a couple of days. Immediately after her dismissal, a small pimple made its appearance on her left nipple, and this afterwards developed into a sluggish ulcer, for which she consulted Dr. Loring. He at once recognized a hard chancre, but called in Dr. Taylor to have the diagnosis confirmed, and it was then found that in the axilla there was a characteristic syphilitic affection of the glands, and that the post-cervical and epitrochlear glands were also enlarged. The patient attributed the sore to the last child she had nursed, but this was, of course, manifestly impossible. She therefore undoubtedly contracted the chancre from mucous patches in the mouth of one of the two infants nursed while in the asylum, which would give an incubation-period of from forty to fifty days.

About the 1st of August the nature of the case was indisputably confirmed by the eruption of a general syphilitic roseola.

Both the feeble children she had nursed died on the same day, the 19th of June, in the suburban branch of the asylum, and the diagnosis given in each case was syphilis. The nature of their trouble does not seem to have been recognized until they reached this

branch establishment; and yet there, notwithstanding the recognition of the disease, they were each put to a different wet-nurse. Dr. Taylor was unable to learn anything of these women; but it is certainly quite possible that both of them may have been similarly inoculated with syphilis. He did not mention the name of the institution referred to, but we have since ascertained that it was the New York Infant Asylum; and there certainly seems to be urgent need of the most sweeping reform in regard to its nursing regulations. In this institution, we learn from the best authority, the greatest laxity prevails in regard to the examination of infants admitted and the way of putting them to nurse. They profess, indeed, to refuse to take syphilitic children at all; but the way in which this rule is enforced may be imagined from the facts above disclosed. Scarcely the form of an examination is observed when children are admitted, and the matrons or nurses have full power to assign them to whatever women they please. Of course the attending physicians can make a change afterwards if they see fit; but they very seldom interfere in these matters.

Dr. Taylor made a number of practical deductions from the case quoted; some of which were the following: 1. It is of vital importance that the physicians of such institutions should be able to diagnose syphilitic lesions from those of ordinary nursing sore mouth and similar innocuous affections, and newly-admitted infants ought to be examined with the greatest care. The mouth is so liable to be affected in hereditary syphilis that it has been estimated that no less than seventy per cent. of its victims suffer from buccal lesions. Dr. Taylor dwelt for some time on the differential diagnosis of these lesions. 2. If syphilis is detected, such children should not be wet-nursed at all. In France it has been customary to bring them up on goat's milk, and this has, in the main, been quite successful. 3. Syphilitic children should be segregated, and each one should have its own nursing-bottle; never being allowed to use another, on account of the danger of the india-rubber nipple conveying infection to healthy children. 4. As syphilis does not usually show itself in those who have inherited it for three or four weeks after birth, whenever a foundling or child in whom there is the slightest ground for suspicion is admitted to such an institution it ought to be bottle-fed for a month. At the end of this time, if the disease has not manifested itself, it can usually be put to the breast with safety. Unless rules of this kind are rigidly observed, Dr. Taylor considers it exceedingly doubtful whether these institutions are not more of a scourge than a benefit to the community. Consider for a moment, said he, what greater evils than actually did occur might have followed in the wake of the case reported. Besides being rendered miserable by the disease herself, the

woman might have communicated it to her own child (fortunately, this was prevented by her nursing it at a different breast from the other children), and afterwards to the baby in the private family, if she had nursed it a little longer. It is possible that every member of that family might then have contracted the disease by kissing the child when it had mucous patches on its mouth. Then, it might have been the cause of a separation between the woman and her husband, or the husband himself might have become infected through her. Furthermore, both the women who nursed the two syphilitic children in the suburban branch of the asylum might have had syphilis, and so the train of evils might be followed out indefinitely.

Dr. Taylor devoted the latter portion of his paper to a consideration of the transmission of syphilis from the nurse to the child, and dwelt upon the extreme care that ought to be observed in the selection of a wet-nurse, especially from such institutions. A chancre might commence in a little pimple or simple fissure of the nipple, the nature of which it would be impossible to determine at once; and it would, therefore, be necessary to wait for further developments in such a case before accepting or rejecting the woman.

But even if the nurse seems perfectly healthy in every way, she ought not to be engaged until the physician has found out with certainty all the children she has nursed during the preceding two months, and whether they are each one absolutely free from any suspicion of syphilitic taint. This is necessary, because the period of incubation before the outbreak of any syphilitic manifestations may be as much as seventy days.

Two other papers have been read during this month before the same Society, and the first of these called the attention of the profession to a therapeutic measure which is comparatively little used at the present day, but which seems likely to have a much wider application in the future, and in a number of affections in which it has hitherto scarcely been tried at all. This was by Dr. E. C. Angell, on "Ancient and Modern Inunction in Health and Disease;" and in the course of it he alluded to the remarkable success which Dr. Taylor achieved by this means in the treatment of typhus and other fevers, at the Clerkenwell Infirmary, between the years 1837 and 1849. The substance he generally employed was what he called "hard ointment," which consisted of equal parts of lard and suet melted together. He also treated rheumatism, phthisis, hydrocephalus, dropsies, etc., by means of inunction, with considerable success. In fevers he regarded it as safer than the cold- or vapor-bath, and he found it quite effectual in lowering the temperature and reducing the pulse. It always produced a feeling of the greatest comfort in the patient, and was seldom or never contra-

indicated. He usually applied it twice a day (but oftener in urgent cases), and from half an hour to an hour at a time.

Dr. Angell next spoke of a paper on inunction, published last spring by Dr. Fisher, of Hoboken, in which he mentioned that it was apparently the means of saving the life of a child in the last stages of cholera infantum, and recommended it in fevers, convalescence from acute diseases, nervous affections, syphilis, rachitis, and many other chronic diseases, especially those of the chest and abdomen in children. He then dwelt for some time on the indications fulfilled by inunction, and the variety of cases in which he had personally employed it.

Such nervous disorders as hysteria, insomnia, and delirium tremens were admirably controlled by it, and he had been peculiarly successful in the treatment by this means of atonic dyspepsia, in chronic cases accompanied by loss of appetite and great depression of spirits. One of the most noticeable properties of this remedial agency was that of supplying permanent warmth to those who were habitually chilly. Many invalids, dyspeptics, and those with weak lungs, who had formerly been obliged to go South every winter, were thus enabled to remain at home now, and even enjoyed the severe weather, which had before been so injurious to them. He also spoke of the immunity which inunction afforded from coughs and colds, as well as from the danger of contagion; so that he thought it a good suggestion that physicians should employ it on their own persons when more than ordinarily exposed. Finally, he proved that the objection that it closed up the pores and interfered with the action of the skin was quite unfounded; for, on the contrary, when well performed it very greatly increased all its functions. Dr. Angell is in the habit of using in his inunctions a very fine variety of vasoline, derived from petroleum. Though a mineral oil, it is very rich in the heat- and fat-producing and antiseptic qualities of carbon. He did not allude particularly to the use of inunction in scarlatina and measles, as now so frequently practised; but Dr. J. C. Peters spoke of this in a few remarks after the reading of the paper.

The President, Prof. Peaslee, thought that Dr. Angell deserved the thanks of the Association for the able manner in which he had presented this subject, and for many suggestions in regard to it which were novel and exceedingly interesting. He could readily see, he said, how inunction might be of service in any case where the skin was hard and dry, whether it were hot, as in fever, or cold, as in atonic dyspepsia, etc., for this process simply supplied what was lacking when the skin was in an abnormal state,—when its functions absolutely could not be performed until it was restored to at least an approximately healthy condition by some such means.

The other paper before the Medical Library and Journal Association was by Dr. Peters, on the subject of apoplexy; but, as he had been induced to appear that evening in order that the Society might not be without a paper, when he had had altogether too little time for preparation, it was scarcely worthy of his reputation.

We understand that the Council of the Association have decided to remove it to the building recently purchased by the Academy of Medicine, on Thirty-first Street; but, as considerable objection to the measure has been expressed among the members, it is possible that they may be induced to reconsider their action.

At the September meeting of the County Medical Society, Dr. Beverly Robinson read a paper on "Post-Nasal Catarrh." This affection he regards as a chronic follicular disease of the naso-pharyngeal cavities, dependent principally on the state of the system in general, and characterized by a constant feeling of stiffness in the nasal fossæ, and a viscid, stringy, muco-purulent discharge into the pharynx. The treatment ought to be constitutional to a large extent. The ordinary tonics, such as cod-liver oil, iron, quinia, and strychnia, are often indicated, and of those agents which are supposed to have a special effect upon the mucous membranes, he has found three of especial benefit, viz., sulphur, cubebs, and ammoniacum. When there is malaria, syphilis, gout, or other dyscrasia or taint, the treatment must, of course, be varied in accordance with the nature of the case. Dr. Robinson has not found iodide of potassium of any service either in syphilitic or in non-syphilitic patients. He thinks that all forms of local treatment have been very much overrated, and that while this may form a useful adjuvant in the conduct of the case, the main reliance must be placed on the modification of the constitutional condition. The nasal douche he regards as dangerous and unsatisfactory (having published his objections to it in full in a paper on the subject last spring), so that he prefers the use of sprays and powders. As an application in the form of a spray, he spoke highly of a combination of carbolic acid and borax in glycerin and water; and one of the most efficient powders he has used is a mixture of iodoform and camphor.

At an extra meeting of the County Society, held October 12, Prof. W. T. Lusk gave an interesting history of the epidemic of puerperal fever in Bellevue Hospital, which commenced in November, 1873, and lasted till June, 1874, when the obstetrical wards were closed. During this period the wards were repeatedly changed, and new resident-accoucheurs came on duty every month, but without any appreciable effect in diminishing the mortality from the disease; and as the nurses were not changed (at least until near the end of the

period), it seems altogether probable that the contagion was kept up by them. After the first month the affection usually showed itself three or four days after labor. From March onward (when, it may be stated, diphtheria was quite prevalent throughout the city), diphtheritic patches about the vulva and vagina were very frequently noticed, as in the epidemic of puerperal fever at the Philadelphia Hospital, so graphically described by Dr. Parry in the *American Journal of the Medical Sciences*. Dr. Storer, who was one of the *internes* at Bellevue at the time of the epidemic, has recently been making some careful microscopic studies of these appearances in Strasbourg, and pronounces them to be undoubtedly true diphtheritic deposits, characterized by extensive colonies of micrococci. Contrary to the experience of Dr. Parry, Prof. Lusk found local applications of decided advantage, and particularly a combination of iodine and Monsel's solution. One great difficulty experienced after nearly all labors during this time was that of getting the uterus to contract properly. Squibb's fluid extract of ergot proved almost powerless in these cases, but quinia was a more efficient agent, which goes to confirm the observations of Dr. Albert H. Smith, reported last June by the *Medical Times* in the proceedings of the Philadelphia College of Physicians. Dr. Lusk spoke of the management of affairs at Bellevue by the authorities as being as bad as it possibly could be. Everything about the hospital was kept on a peace footing instead of a war footing, in spite of the earnest protest of the physicians in charge, and he thought the garden of Eden itself would have been converted into a pest-house under similar circumstances. From January 1 to June 11, the date when the obstetrical service was transferred to Charity Hospital on Blackwell's Island, there were 31 deaths out of 166 confinements.

At one of his recent clinics, Prof. Sayre made a section of the latissimus dorsi muscle, and, so far as he has been able to ascertain, this is the first time that the operation has ever been performed. The case was one of excessive lateral curvature of the spine, in a young man of twenty-one or -two; the deformity having originated in an inequality in the length of the two lower extremities, and having been greatly increased by his occupation. In the dorsal region the spinal column was deflected strongly to the right, the ribs were permanently bent and crowded together, and the muscles enormously developed on that side. When the patient was suspended by straps passing under the axillæ, the stretched latissimus dorsi of the left side was seen to come out prominently like a whip-cord. Dr. Sayre holds, as a fundamental rule of universal application, that whenever a muscle is put fully upon the stretch, and then still further tension is brought to bear upon it, if a distinct muscular spasm is produced thereby it is altogether

impossible ever to restore the muscle to its normal condition without cutting or rupturing its fibres. When this test was applied in the present instance, a spasm was instantaneously produced as if by the shock of an electric battery, and Dr. Sayre therefore resolved that it was necessary to cut the muscle. Before proceeding to do this, he ran briefly over the main points to be understood in the management of lateral curvature, illustrating the subject by a careful dissection of the muscles of the back, which had been made by Dr. Wyeth on the cadaver. For the operation Dr. Sayre had had made expressly a special tenotome, with an unusually long shank, and with this he divided the fibres of the muscle, still kept upon the stretch, by a subcutaneous section, with the instantaneous result of materially lessening the deformity of the patient. Adhesive plaster was immediately applied over the minute external wound, thus checking the slight hemorrhage at once; and over this a roller bandage. The patient was then ordered to be put in bed on his back, with rubber bandages attached to the sides of the bed passing around the dorsal and pelvic regions in opposite directions, so as to keep the divided muscle on the stretch while union was taking place. When this had occurred, Sayre's simple apparatus for lateral curvature was to be applied. This consists of a firm leather pad placed under the axilla on the side opposite the curvature, with an elastic band passing over the shoulder of the affected side, a second pad to go over the seat of greatest curvature, and a third for the hip of the same side; the whole being kept in place by connecting elastic straps and perineal bands.

A second case, almost identical with the above, was then shown in a lad who was a boot-black, and used his right arm exclusively in his work. When this patient was suspended, the border of the latissimus dorsi was seen to come out in the same way, but, as no spasm was produced by the application of any extra tension, the apparatus just described was to be applied without any previous section of the muscle. This apparatus does not and is not intended to correct the deformity of lateral curvature, its design being simply to put the muscles in the best condition for overcoming this themselves. Of course, when the bony frame of the thorax is permanently distorted it can never be entirely obviated; but still a great deal can be accomplished by appropriate exercise of the muscles systematically persevered in. At the conclusion of his clinic, when Dr. Sayre passed into the faculty-room, he met Professors Van Buren and Flint, Sr., chatting together, and immediately described to them the success of his operation in glowing terms; whereupon Dr. Flint remarked, "To think of any man supposed to have arrived at years of discretion getting up such enthusiasm, and that on a purely surgical subject, is entirely

beyond my comprehension." "Oh, well," replied Dr. Sayre, "I have to throw in the ginger and peppermint; for Van Buren, here, towers so high above us all with his comprehensive knowledge and graceful culture that the rest of us would be lost sight of entirely if we did not manage to attract a little attention by some trick or other." "Yes," said Dr. Flint, "Sayre's strong point is his enthusiasm, and ponderosity is Van Buren's."

The unexpected death of Dr. Krackowizer is a great loss to the profession here. He died at his country home at Sing Sing, of peritonitis resulting from typhoid fever.

Diphtheria is again alarmingly prevalent, over a hundred cases having been reported during the week ending October 9. At Astoria, just across the East River, the deaths from it are said to average four per diem.

We have heard many nice things said about the very handsome appearance of the *Medical Times* in its new dress, but it seems to be the general impression that the internal matter is of a character so deserving of such an elegant exterior, that the old proverb that "fine feathers make fine birds" can hardly be said to be applicable in this case.

PERTINAX.

TO THE EDITOR OF THE PHILA. MEDICAL TIMES:

DEAR SIR,—Your editorial in the *Times* of last week speaking of a State Examining Board reminds me that the idea of having such a board for this State was acted upon by the Medico-Chirurgical Society of Philadelphia, in 1869 or 1870, by the appointment of a committee to draft a bill for that purpose to be presented to the Legislature.

The committee deliberated on it carefully for some time, consulted legal authority, and framed an act, which was presented to the Legislature, then sitting. It came up before the Senate and passed that body, but was smothered in the committee of the House.

As far as I can remember, the bill provided for an annual appointment by the Supreme Court of a board of seven examiners from among the regular profession in the State, of reputation for education and medical knowledge, etc., none of whom to be connected with any of the medical schools as professor or lecturer. This was so provided to prevent favoritism, jealousy, etc.

Then, as any other chartered school or system had the same rights and immunities under the law, it was provided that they should be represented by one examiner for their special branch of materia medica and practice, but who did not sit with the regular board.

The candidates for examination must be graduates of a medical school in good standing and respectability, and were required to first register with the secretary of the board, and show him the diplomas, a record of which

he was to make. Then, if of the regular school, to pass the examination of the board of regular physicians only. If of any other school or system, to pass the regular board in everything but the materia medica and practice, for which he was sent to the examiner of his system for the examination in his peculiar line.

The examination creditably passed, the name was registered, published, and a certificate given, which granted authority to practise in any part of the State, until revoked by order of the board for any criminal or other improper actions.

This forced the homœopath and eclectic to be educated in the fundamental science of medicine if he desired to practise.

If it did not destroy the irregular schools, it would compel them to adopt a thorough course of tuition in everything relating to medicine and surgery; otherwise, none of their graduates could pass the State examining board.

If we had irregular physicians, we could be sure that they were properly and thoroughly educated for their profession.

Very respectfully,

P. D. KEYSER, M.D.

1630 ARCH STREET, October 21, 1875.

PROCEEDINGS OF SOCIETIES.

PATHOLOGICAL SOCIETY OF PHILADELPHIA.

THURSDAY EVENING, OCTOBER 14, 1875.

The PRESIDENT, DR. WM. PEPPER, in the chair.

Syphilitic caries of the skull. By Dr. EDW. L. PARKS.

THE patient, a negro, about 38 years old, entered the venereal wards of the Philadelphia Hospital, in charge of Dr. Maury, in 1868. Eight years previously he had a chancre on the glans penis near the frænum (the scar of which was still visible), for which he was not treated. There had been involvement of the inguinal lymphatics. Five or six years after the appearance of the chancre he sought medical aid for what he considered neuralgia or rheumatism of the head and some of the articulations and more superficial bones. His naturally dull intellect was clouded by an unusual hebetude when admitted to the wards, so that a full and reliable history was not to be had from him.

He complained of severe pain throughout the whole skull,—dull, gnawing, boring, and always worse at night. There were no marks of cutaneous or other constitutional lesions to be seen. He was at once put upon appropriate treatment, with moderate doses of iodide of potassium. At the end of a week, as he was not relieved, it was decided to increase

daily the dose of the iodide of potassium. At the end of three weeks he took daily ninety grains, with marked benefit. On the way to breakfast one morning he fell, with symptoms like those of apoplexy, and died within five minutes.

A post-mortem examination revealed the most wonderful erosive and carious inflammation of the skull, which was very much thinned, and lighter than usual. The base seemed somewhat softened, with little other appreciable change. All the other viscera were entirely free from any gummosus deposit or structural change,—a thorough examination having been made.

The points of interest in this case are:

First, that the primary lesion was not treated; especially noteworthy in connection with the severity of his final symptoms, and his death from the disease.

Second, the selection of the bones of the head as the seat of the constitutional disease, to the exclusion of all the tissues and regions.

However, this is not a unique condition.

Aneurism of the thoracic aorta. By Dr. LOUIS STARR.

Henry W., æt. 33, a stone-cutter by occupation, was admitted to the medical ward of the Episcopal Hospital on September 3, 1875. He had always been perfectly temperate in his habits, and, although he had worked steadily at his trade, had never overtaxed his strength or subjected himself to any sudden strain. In early life he contracted a venereal sore, which, according to his statement, had not been followed by any decided manifestation of constitutional syphilis. With the exception of occasional attacks of intermittent fever, he enjoyed fair health until the commencement of his last illness, about the 20th of August, 1875. At this date he again began to suffer from malarial poisoning, but was not obliged to give up work until September 1, when he had a chill, followed by fever and sweating. On admission he complained of general debility, headache, soreness in the muscles of the back and legs, and pain in the right side of the chest; the latter was neuralgic in character, and was usually seated about one inch below the middle of the clavicle, but often extended from this point through the chest, towards the angle of the right scapula. His tongue was heavily coated, his bowels constipated, and there was some nausea, with urgent thirst and almost complete anorexia. His pulse was eighty per minute, regular, moderately strong, and equal in both radial arteries. Physical exploration revealed no pulmonary or cardiac disease, and, on examination, the urine was found to be normal.

Several hours after coming into the hospital he had a well-marked malarial paroxysm. Under appropriate treatment his general condition improved steadily, and he had no more chills; at the same time there was little diminution of the pain below the right clavicle or

of the sensation of dryness of the fauces and thirst. There was also upon several occasions quite profuse sweating, confined entirely to the head and shoulders. At 1 P.M. on September 16, after a hearty dinner, which had been eaten sitting up in bed, he stretched himself back as if about to go to sleep, and in this position was found dead four or five minutes afterwards. The patient had been unusually well during the morning of the 16th, and there was no apparent cause for his sudden and very unexpected death.

The post-mortem examination was made four hours after death. The body was well nourished. On opening the thorax the heart was found in the normal position, but appeared to be very much enlarged; when an incision was made into the pericardium, however, this seeming increase in size was ascertained to be due to the distention of the pericardial sac by a large, recently-formed blood-clot, which with the bloody serum surrounding it weighed sixteen ounces. The pericardium was loaded with fat, and was much thickened near its attachment to the great vessels. The heart weighed thirteen ounces; both ventricles were firmly contracted, and the left was somewhat hypertrophied, its walls being one inch and an eighth in thickness. All the chambers of the heart were empty. The leaflets of the mitral, tricuspid, and pulmonary valves were healthy, and those of the aortic valve, though thickened along their edges, were competent. The aorta was atheromatous and considerably dilated, and was filled up to the point of origin of the innominate artery with a currant-jelly-like clot. On the anterior surface of the vessel, about half an inch above the semilunar valve, there was a small dissecting aneurism communicating with the artery by an opening one-eighth of an inch in diameter; to the left of this and one inch above the valve there were three other openings; the largest of these, a quarter of an inch in diameter, communicated with a small false aneurism scarcely the size of a filbert, while the two smaller ones opened into another false aneurism nearly as large as a walnut. The upper two-thirds of the wall of the latter were formed by the pericardium, but the lower portion was composed merely of a thin layer of connective tissue, and in this situation there was a rent, half an inch long, through which the blood found in the pericardial cavity had escaped. The centre of the clot filling this aneurism had undergone softening, leaving a free passage between the aorta and the pericardial sac. Both of the smaller aneurisms were filled with firm laminated clots. On the right side of the aorta, an inch above the valve, there was a fissure an inch and a half in length, running transversely, and extending completely through the arterial coats; the edges of this were separated by a prolongation of the clot which occupied the inte-

rior of the vessel. The lungs were healthy. The brain and abdominal viscera were not inspected. Although there was no evidence of constitutional disease, yet there can be little doubt of the syphilitic origin of this condition.

(To be continued.)

REVIEWS AND BOOK NOTICES.

LECTURES ON DISEASES OF THE NERVOUS SYSTEM. By JEROME K. BAUDUY, M.D. Philadelphia, J. B. Lippincott & Co.

How many courses of medical lectures are delivered yearly in the United States we do not know, but the aggregate number must be very large, and if all of them should be published, American medical literature would certainly grow as rapidly as Jonah's gourd in bulk, if not in value. We admit very willingly that the present volume represents a course of more than average value, but we are unable to perceive either in the wants of the profession or in the exceptional experience or learning of its author any grave necessity or, indeed, any very good reason for its being born into the permanent life of paper and ink.

Clearly and carefully written, fully brought up to the level of the English literature of the day, the book will no doubt prove interesting and valuable to the general practitioner, whose knowledge of this class of diseases is often so slight. But it is in no way superior to the treatises which have preceded it, and, to one familiar with the subject, its perusal must be disappointing and even wearisome. We have read nearly all of it, and have failed to find anything novel in fact or treatment. More than this, its author does not appear to be familiar with the latest researches of French and German writers. In the preface he acknowledges his indebtedness to twenty-five authorities, the works of all of whom, with possibly one or two exceptions, were written in English or have been translated into the language. The amount of material added to our knowledge by some of these gentlemen is infinitesimal, so that the omission of the towering names of various continental writers is more striking. Of all living men, Charcot, of Paris, has probably done more than any other to advance our knowledge of nervous diseases; yet the reader of the volume before us will from it scarcely learn of his existence.

Familiarity with the "Leçons" of Charcot would probably have prevented Dr. Bauduy from dismissing the probably true theory that progressive muscular atrophy is dependent upon disease of the anterior cornua of the spinal gray matter, with the simple statement that it is "an hypothesis which I need hardly say is more than doubtful;" and also from making the certainly unproven, and probably untrue, assertion "that the characteristic pa-

thological and anatomical alteration in progressive muscular atrophy is a lesion of the sympathetic nervous system."

We do not want to be over-severe upon the volume of Dr. Bauduy. No doubt it will be praised by many critics, and its pleasant style will gain for it a hearing, and enable it to do good service in diffusing knowledge. It will be said in its defence that it claims to be no more than it is. This is true; but the world is flooded with books of just this class. The temptation "to write for practice" is so strong that we are in danger of a literature based not upon experience, but upon hope and desire; not the ripened fruits of mature knowledge, but the first buddings of a young and crude existence. It is far better that the doctor should write his book when he is about passing off the stage than when he is just coming into notice; better for the early years of life to be spent in original research and study, and not in making books out of other books. And it seems to us that it is the duty of every reviewer to try by all fair means to repress this destructive tendency of the present.

GLEANINGS FROM EXCHANGES.

ON THE METHODS OF RENDERING THE FEMALE URINARY BLADDER ACCESSIBLE, AND ON PROBING THE URETER IN WOMEN (*New York Medical Journal*, October, 1875).—Professor Simon, of Heidelberg, described as follows his method of exploring the female bladder. It consists of three acts, viz.: the slitting of the orifice of the urethra, which is the narrowest and most unyielding part, the dilatation of the urethra itself by means of plug-shaped specula, seven different sizes being used, the smallest having a diameter of three-fourths of a centimetre, the latter of two centimetres; and, finally, the bimanual digital palpation of the bladder. Two manipulations are of great use in this latter procedure.

First, on passing the forefinger through the urethra, introduce at the same time the middle finger into the vagina, then advance with the forefinger into the bladder until the margin of the septum urethro-vaginale presses against the commissure of the two fingers. If this direction is neglected, and the middle finger doubled into the hand, it will press against the labia majora, and the forefinger will not advance as far by at least one centimetre. The second manipulation consists in pushing the apex of the bladder against the exploring finger with the other hand. The apex is thereby inverted, its mucous surface reached and directly palpated with the point of the finger. Only those lateral parts which are attached to the bone are not so easily reached, but an operation requiring the most accurate

control, *i.e.*, the extirpation of a foreign growth, can be easily performed.

By the method described, even the narrowest urethra can be dilated, without the least force, and in a few minutes, to that width which is warranted by the individual circumstances.

It is important, however, to know to what extent the urethra may be dilated without danger of producing permanent incontinence. Prof. Simon's numerous investigations and observations have taught him that one can proceed with plugs of 1.9 to 2 centimetres in diameter, 6 to 6.3 centimetres in circumference, in the bladder of a grown woman, without any noteworthy disadvantage. In girls, dilatation of course must not be carried to the same extent, and should be in proportion to the development of the girl and the size of her urethra. In the adult, dilating-plugs of 6 to 6.3 centimetres in circumference, *i.e.*, 1.9 to 2 centimetres in diameter, can be used without danger; in extreme cases, *i.e.*, where the disease justifies a rather more daring course, dilatation may be increased as far as from 6.5 to 7.0 centimetres in circumference. In girls, 4.7 to 6.3 centimetres in circumference are the measures inside of which the surgeon has to keep, according to each individual case.

A degree of dilatation in which incontinence need not be feared is perfectly sufficient in a majority of cases, where dilatation is desirable for diagnostic or therapeutic purposes. The dimensions of 2 centimetres in diameter, = 6.3 centimetres in circumference, are also those of our largest speculum, which is a width sufficient to admit the largest finger into a urethra, without any exhibition of force. The thin stem of an instrument may then be placed at the side of the finger. The indications for dilatation of the urethra are as follows:

1. For the diagnosis of the diseases of the mucous membrane.
2. For the diagnosis of foreign bodies and stone.
3. For the extraction of such bodies.
4. In cases of inveterate catarrh of the bladder, for the purpose of applying strong cautery.
5. For the cure of fissures of the urethra.
6. For the diagnosis of defects in the vesico-vaginal septum when the vagina is closed up.
7. For the diagnosis of the seat and extent of growths and tumors in the vesico-vaginal septum.
8. For the extirpation of tumors, especially of papillomas starting from the mucous surface of the bladder.
9. For the discovery and subsequent extraction or excision of renal calculi from the vesical part of the ureter.
10. For the opening of hæmatometra, when puncture is impossible or too dangerous between the bladder and the rectum.
11. For the cure of colo-vesical or antero-

vesical fistula, by cauterizing the ostium vesicale of the fistule.

The operation of probing or catheterizing the ureter is likely to be of great advantage in the diagnosis and treatment of some renal diseases. Prof. Simon describes his method as follows:

After the urethra is dilated in the above-described way, we search for the ligamentum interuretericum with the finger. This ligament is about one inch from the sharply-marked internal orifice of the urethra; in the middle it is usually so little prominent that it can only be distinguished by experienced explorers. Around the orifice of the ureter, which is one-half to three-quarters of an inch away from the middle of this ligament, the muscular coat of the ureter, which ends in the interureteric ligament, forms a kind of pad, and is easy to distinguish. The orifices on these pads are very thin splits, and, since they have only very narrow edges of mucous membrane, they are imperceptible to the touch. On account of this, the third act, viz., the introduction of the probe, is rendered more difficult. In order to effect it we must fix the "Harnleiterwulst" with the finger in that region where the orifice must be situated, and then push the head of the probe, which lies close to the side of the finger, towards this region in the direction of the ligamentum interuretericum from the inside and below, upward and outward. The handle of the instrument must be led to the opposite side, and at the same time be raised up against the arcus pubis, in order that the head of it may not glide off from the very steep trigonum. By slightly pushing we try to introduce the head of the probe into the orifice of the ureter. If the probe does not go into the orifice, it will be arrested by the walls of the bladder; but, if it enters, it can easily be pushed on in an upward and outward direction. The inlying finger tells whether the probe has remained in the cavum vesicæ, or whether it has really entered into the orifice. In the latter case, we feel the probe covered by mucous membrane for a few centimetres, and we can feel the borders of the orifice all around the probe. If we wish to sound the pelvis of the kidney, we have only to push the probe on in a lateral direction until at a height of seven to eight centimetres and we strike the brim of the true pelvis (linea innominata). Now it becomes necessary to move the handle of the probe to the inner face of the thigh of that side on which the ureter is probed, and to incline it so that the inner end of it is placed parallel to the vertebral column, and the head directed more towards the anterior abdominal coverings. In this direction the probe advances very readily into the upper end of the ureter and the pelvis of the kidney. If the catheter has been used instead of the probe, the urine will now ooze out drop by drop, or sometimes it will spurt out in a stream at intervals of a half to one minute.

VALVULAR CLOSURE OF PENETRATING WOUNDS OF THE CHEST (*The Clinic*, September 4, 1875).—Dr. D. T. Gilliam reports the case of a wound of the chest involving the lung, with entrance of air into the pleural cavity, in which he applied over the external wound a piece of waxed muslin, fastened only at its upper border by adhesive strips. It effectually prevented the further ingress of air during inspiration, and at the same time did not prevent its egress during expiration. It also permitted the wound to be kept open until all hemorrhage had ceased, and subsequently for purposes of drainage.

SUPRA-CONDYLOID AMPUTATION OF THE THIGH (*The Dublin Journal of Medical Science*, August, 1875).—Dr. Wm. Stokes reports several cases of supra-condyloid amputation of the thigh, for which operation he claims the following advantages:

1. The posterior surface of the anterior flap is bound with a natural synovial lining which largely diminishes the chances not only of subsequent exhaustive suppuration, but also of purulent absorption.
2. Any possibility of the split patella shifting from its place on the cut surface of the femur is prevented by the high femoral section, and by a method of stitching the two bones together, which Dr. Stokes describes.
3. The existence of an osseous curtain, which is formed by the split patella covering the cut surface of the femur, diminishes, probably, the chances of pyæmia, and is not liable to slough away, as the periosteal curtain recommended by Von Langenbach undoubtedly is.
4. The vessels are divided at right angles to their continuity, and not obliquely as they are in other flap-operations.
5. The existence of a posterior flap diminishes the chances of any wide gaping of the wound posteriorly, while the anterior flap being oval increases the chances of the stump tapering gradually towards its extremity and assuming the form of a rounded cone.
6. The preservation of the normal attachments of the extensors of the leg.

INTESTINAL SECRETION (*The Doctor*, October 1, 1875).—At the annual meeting of the British Association for the Advancement of Science, a report was presented by the committee on intestinal secretion. They considered that the experiments they had made proved the absence of influence on intestinal secretion through the splanchnic nerves, the pneumogastrics, the sympathetic above the diaphragm or the spinal marrow; and the probable influence of the ganglia contained in the solar plexus, though certainly not of the two semilunar ganglia exclusively. Also the independent occurrence of hemorrhage and of paralytic secretion appeared, in the view of the committee, to point to a separate nervous influence on the blood-vessels and the secreting structures of the intestines.

RHEUMATIC TETANUS (*The Doctor*, October 1, 1875).—Dr. F. Franzolini relates a case of tetanus arising from exposure by sleeping on the damp ground, after great fatigue, successfully treated by prolonged warm baths and the continual use of chloral and morphia. The chloral was given frequently by the stomach, and the morphia by subcutaneous injection. The first bath was for six hours, at a temperature of 40° C. (104° F.), and subsequent ones lasted five, four, three, or two hours. This treatment was carried out from the 18th to the 30th of the month; but the daily use of chloral and morphia was continued some time longer. Of the first ninety hours of his disease the patient passed forty-eight in the bath at 40° C. In twenty-nine days he consumed nearly four ounces of chloral hydrate, and about twenty-two grains of hydrochlorate of morphia were injected. Although kept so long in a state of almost constant narcotism, the mental powers of the patient were in no way affected.

MISCELLANY.

HOSPITAL OUTLINES: SKETCHES AND PORTRAITS.

[Written by a patient in an Edinburgh Hospital.]

PART I.—SKETCHES.

I. FIRST IMPRESSIONS.

THE mist of morn still drapes the clattering street,

The northern summer air is dank and cold,
And, lo, the Hospital—gray, quiet, old:
My only hope, the Art's best-loved retreat.

Through the loud emptiness and airy gloom,
A small, strange child, so old and yet so young!

Her little arm besplinted and beslung,
Precedes me gravely to the waiting-room.

Sequent I limp—my confidence is gone;
The gray-haired soldier porter bids me on,
And on I limp, and still my spirits fail:

A tragic meanness seeming to environ
These corridors and stairs of stone and iron,
Chill, gaunt, and clean—half workhouse
and half jail.

II. WAITING.

A square, squat room that stinks of drugs and dust,

The walls and atmosphere a brownish drab.
The floor is foul; fair is the dressing-slab
With spotless lint, and tinware pure of rust.

A lank, bare bench shrinks round three sides,
and there,

While certain smart young flippant Shal-
lows tend

Such ills as Art incipient may amend,
Two endless hours I sit, and ache, and swear.

The decent woman strips her plastered eye;
The two old men their two old ulcers bare;
The boy, his leg unbandaged, starts to cry;

The girl, tight-lipped—"Yon bluestane's
awfu' sair!"

To shut mine ears and raise my heart I try,
Thinking of darker hours that long since
were.

III. THE WARD.

Four long brown walls—a waste of plaster,
bare

Save in some ragged prints; a glowing
grate;

A flooring half of boards, half flagged with
slate;

A crowd of bottles; space and light and air;

A lean gas-pipe; a table slim and spare,
With bandages and lint; seven truckle beds,
Above whose coarse red rugs the horrent
heads

Of seven pale poor devils turn and stare.

Some read; some knit; some sit up wearily,
Resting their arms upon their crooked
knees;

Some sleep; more laughter comes from
them than moan.

This is a ward in hospital. You see
The field where Science battles with Dis-
ease,

And 'Hope—sweet Hope—succumbs to
Death alone.

IV. THE VISIT.

A many-footed rush resounds without,
Through the long, flagged, deep-vaulted
corridor,

And in the surgeon strides, at least three-
score

Of pupils with him—learner, dandy, lout.

He walks as one who is not vexed with doubt;
They straggle after him across the floor,
Silent, respectful of his place and lore,
Not always keen for what he is about.

Presenting to contemplative beholders
A curious plump of sentient backs and shoul-
ders,

They group themselves about a certain bed;

A few short words you cannot catch, are said;
Then comes a silence, and your pulses
quicken;

And then a crunch of bone and steel—you
sicken.

V. BEFORE OPERATION.

Behold me gruesome, waiting for the knife!

A little while, and at a leap I storm

The thick sweet mystery of chloroform,
The drunken dark, the little Death-in-life.

The gods are good to me: I have no wife,
No helpless child, to think of as I near
The fateful minute; nothing all too dear
Unmans me for my hour of passive strife.

Yet am I tremulous and somewhat sick;
And, face to face with chance, I shrink a little,
My hopes are strong, but ah! my will is weak.
Here comes the basket. *Euge!* I am ready.
But, gentlemen my porters, life is brittle;
You carry *Cæsar* and his fortune—steady!

VI. AFTER OPERATION.

Like a weak light involved in heavy smoke,
So through the anæsthetic shows my life;
So flashes and so falls my thought, at strife
With the strong stupor that I gasp and choke
And sicken at, it is so foully sweet.
Faces look strange from space—and disappear.

Far voices, sudden-loud, offend mine ear—
To hush as sudden—all my senses fleet.

All is away—except a heavy pain,
Grinding through leg and foot. And, brokenly,
Time and the place glimpse on to me again.

And, unsurprised, out of uncertainty,
I wake—relapsing—somewhat faint and fain,
To an immense complacent dreamery.

VII. NIGHT PICTURE.

Implacable, the speck of gas compels
My fascinated eyes, and makes them sore;
Perverse, the bedclothes ramble, more and more;

Like rockery the mattress sinks and swells.

The men are slumbering, but my soul rebels
Against one resolute, sonorous snore;
An opiated, exasperating roar,
The murder of my sweet first doze it knells.

Waking I dream. My sleepy fancy plumbs
The sea of my mishap; a cinder drops;
The shadow pulses as the loud flames fret;

My neighbor groans and turns; the snorer stops,

Chokes, gasps him free again; the night-nurse comes,
Noiseless and strange: "Are ye no' sleepin' yet?"

VIII. ANOTHER.

Round one poor bed is stretched the painted screen,
Whose leaves extemporize a decent gloom,

Where Death and Life, as in a private room,
Meet and arrange the honors of the scene.

The shadows melt into the growing gray;
The gas burns pale. My thoughts are gruesome yet,

But my vague sense of impotent regret
Fades in my pipe's blue tender whorls away.

Before the creaking fire the widow cries,
Huddled and hushed; the fresh, young night-nurse dozes;

We talk by fits, or think—for in this wise

A gaunt Perhaps itself to us discloses;
And lo, the sun! strong for his new emprise,
All Hope and Health, superb with wild mist roses.

IX. FLORAL.

Broad through the open door there stole to me,
Homesick and tired, a sudden smell of flowers:

A memory of mists, and suns, and showers,
Borne beautiful among my reverie.

Two girls came in. They carried, fair to see,
The homely growths of autumn, sweets and sours,

With waifs and strays of summer's golden hours

Tied up in little nosegays daintily.

To each of us they gave, as, week by week,
Nature's cheap gems among the hurt and sick,
With kindest instinct beautiful they share;

And when they left the close infirmary reek,
A sweet abnormal savor lingered there
Of sunburnt green, clear space, and country air.

ADULTERATION OF CHOCOLATE.—It is rare, nowadays, to meet with chocolate or cocoa unmixed with flour or starch. W. Broichmann suggests an easy test. The fine farinaceous particles of the cocoa-nib give merely a violet reaction with iodine, whilst the flours and starches employed to adulterate them give a deep-blue precipitate.—*Journal of Applied Science.*

HOW TO BOIL RICE.—The way they boil rice in India is as follows: Into a saucepan of two quarts of water, when boiling, throw a tablespoonful of salt, then put in one pint of rice, previously well washed in cold water. Let it boil twenty minutes, throw out in a colander, drain, and put back in the saucepan, which should be stood near the fire for several minutes.—*Journal of Applied Science.*

OFFICIAL LIST

OF CHANGES OF STATIONS AND DUTIES OF OFFICERS OF THE MEDICAL DEPARTMENT U.S. ARMY FROM OCTOBER 12, 1875, TO OCTOBER 22, 1875, INCLUSIVE.

EDWARDS, L. A., SURGEON.—Relieved from duty in Military Division of the Atlantic, to proceed to Philadelphia, Pennsylvania, and, upon arrival, report by letter to the Surgeon-General. S. O. 208, A. G. O., October 15, 1875.

WEBSTER, W., SURGEON.—Assigned to duty at Plattsburg Barracks, New York. S. O. 204, Military Division of the Atlantic, October 11, 1875.

JANEWAY, J. H., ASSISTANT-SURGEON.—Assigned to duty at St. Augustine, Florida. S. O. 153, Department of the South, October 15, 1875.

BROWN, J. M., ASSISTANT-SURGEON.—When relieved by Surgeon Webster, assigned to duty as Post-Surgeon at Fort Wood, New York Harbor. S. O. 204, c. s., Military Division of the Atlantic.

HOFF, J. V. R., ASSISTANT-SURGEON.—When relieved by Assistant-Surgeon Jaquette, assigned to duty at Fort McPherson, Nebraska. S. O. 113, Department of the Platte, October 18, 1875.

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Very truly, your sincere friend,

THOMAS J. STRONG.

Letters addressed to Dr. Palmer will receive due attention.

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